MAKE A HA
BREAKST

Hardcore breaks is one of those tricky, borderline-controversial terms. It's used to describe a rough-edged style of music that draws its primary influences from the earliest forms of breakbeat dance music. In general, hardcore breaks are associated with the early 1990s hardcore rave sound that spawned jungle, drum 'n' bass and happy hardcore. While there are many other tags given to music with similar values – including 'rave breaks', 'j-tek' and even 'new old-skool' – they're collectively described by purists as 'new rave' or 'breakbeat hardcore', depending on who you ask.

Back then, the genre was just called hardcore, and for some it was absolutely a way of life. If you're recalling records from the first half of the 1990s by Baby D, The Prodigy, SL2, Shut Up And Dance and Urban Shakedown, you're along the right lines. If you have no idea what we're talking about, then you're in the right place – so keep reading to find out what all the fuss was about.

What happened to hardcore? The answer is multifaceted. Towards the mid-90s, the UK's cultural and political landscape underwent an upheaval. Combined with the huge strides being made in music technology at that time, these changes resulted in the hardcore scene dying away. But to this day, a core of devoted musicians still missing the charm of that particular brand of early breakbeat music – plus an ever-growing number of fresh faces from all over the world discovering the music for the first time – strive to recreate its lost vibe.

Some of the biggest acts in house, trance, dubstep and other popular genres are still touched by that golden era in dance music. We're about to show you why, and how you too can pay homage to one of the most influential times in the recent history of music.

cm DVD

ON THE DVD

Audio files from the walkthroughs are in the **Tutorial Files** folder

WHERE IT ALL STARTED

1990 Mental Cube *Q*

This is an underrated little gem of a tune from the era just before breakbeats took over. Despite being before hardcore's time, it still exhibits energetic drum programming alongside many of the other musical features that formed the blueprint for the classic hardcore sound.

1991 Sonz Of A Loop Da Loop Era *Far Out*

An original and distinctly uplifting house-style piano meets the kind of vintage breakbeats that probably sounded more typical of hip-hop at the time. This was an instant rave favourite that still smashes it at old-skool parties today.

1992 The House Crew *Euphoria (Nino's Dream)*

Just shy of seven minutes of utter sound sample collage madness, painting sublimely euphoric textures over heavy sub-bass and layer upon layer of breakbeats. It might sound totally out of place next to most of today's music, but there's a certain unique soul to it.

1993 M-Beat *Just A Little*

Early jungle-style beats fuse with a strong ragga influence and a jazzy house piano. Notice the abrupt mood swings between sections – they capitalise on the contrast between the different sounds used to reinforce the impact of new passages.

1994 Luna-C *Piano Progression*

Ruthlessly diced breakbeats and a hip-hop-styled 808 bass drum pave the way for an unusually elaborate piano part. Merely a year later, the happy hardcore sound had changed so drastically that such a classic tune as this wouldn't have made it into reality.

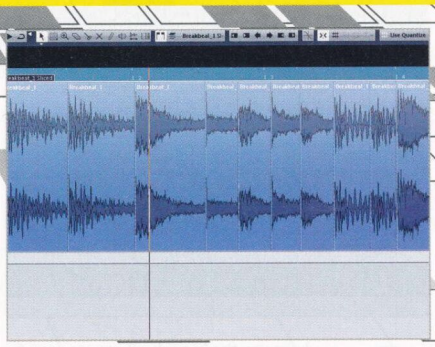
1995 Origin Unknown *Truly One*

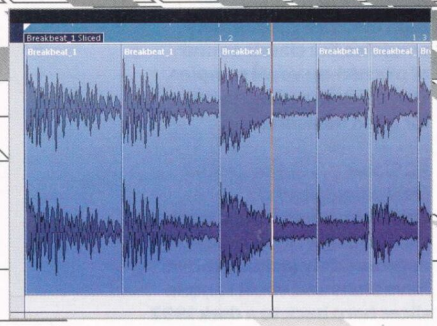
Darker records always coexisted with the more uplifting sound that the others listed here exhibit. This one in particular flaunts its sophisticated drum programming and booming sub-bass. It's a clear precursor to drum 'n' bass as we know it today.

HARDCORE TRACK

We take a rose-tinted look at the rave scene of the early 90s, and explore how to create that classic vibe with a fresh sound

> Step by step Slicing up classic breakbeats

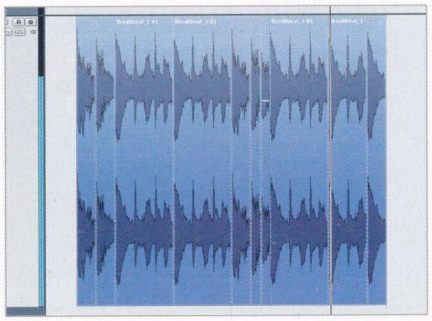


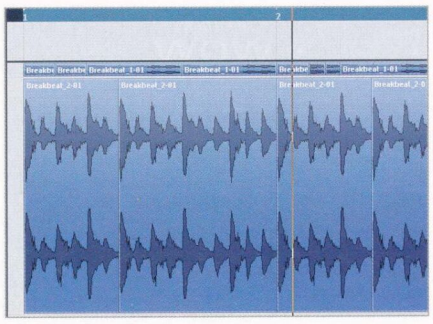


1 > We've provided **Breakbeat_1.wav** on the **cm** DVD. It's a recording of a typical hardcore breaks-style drum loop that's been run through all manner of vintage outboard gear. You'll find plenty of this type of vintage loop online and as part of commercial sample libraries.

2 > Import the loop into your sequencer and slice it at every single hit. Whether you're using automatic hitpoint detection or not, be sure to zoom in nice and close to avoid any mistakes. You'll notice that the natural groove is a little off the grid.

3 > Set the project **Tempo** to **145bpm**. Now, carefully drag key slices onto the grid. Listen extremely critically at this stage, because some hits will sound better with their relative positions retained. Generally speaking, beats 1, 2 and 4 sound good on the grid.





4 > When you're happy with the new, tightened timing of your loop, bounce it as a new audio file. Now you can create your own rhythmic variations by reslicing and copying sections of the new sample. You could even use a swing grid at this stage if it sounds too rigid.

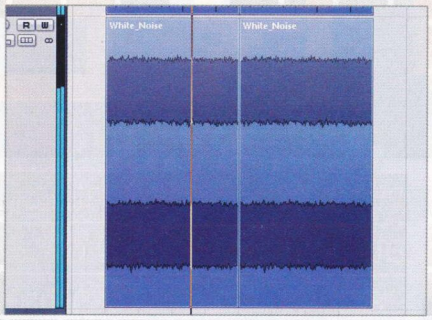
5 > We've included a second loop – **Breakbeat_2.wav** – on the DVD. It has great stereo width and is very bright and jittery. Import it and follow the previous steps for this new loop. Try to arrange it in such a way that it complements the rhythm of the original loop.

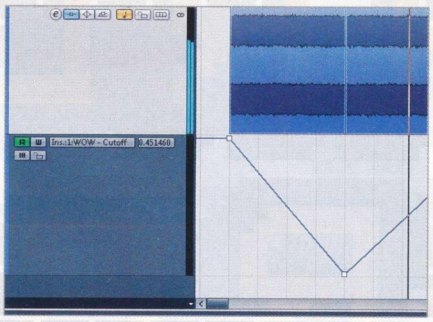
POWER TIP

>Bang in time

Back in the day, slicing a breakbeat up into individual hits would have been done on a hardware sampler or workstation with a tiny, lo-res LCD screen. For the most part it was an impractical process, so producers invented a sneaky workaround. If they pitched the sample up or down (using the old kit's resampling methods), the sample's speed shifted along with its pitch, and they could get full loops into time. This trial-and-error method meant that as few as two large slices would probably suffice for a whole track. If you're aiming for that authentic retro vibe, you can always use repitching algorithms to mimic that pitched-up quality.

> Step by step
Adding a modern twist with some white noise





1 > On the **cm** DVD we've included **White_Noise.wav**, which is a stereo white noise recording from a digital synth. Simply applying a filter and finding a variety of ways to move the cutoff will make this one sound go a long way. Import it into your project and place the effect where you want it.

2 > You need to insert an automation-ready filter effect with a band-pass mode. WOW by SugarBytes is a great plug-in for the job. From the default preset, set the filter type to **Bandpass 12dB** and reduce the **Resonance** to around **50%**. Now for automation...

3 > Automate the **Cutoff** so that it sweeps around and creates clean, atmospheric textures in your track. Try adding a ping-pong delay on the next insert to really accentuate the effect. Quick zips and zaps will work nicely, as well as long, slow, falls and rises.

Influenced by the old-skool

High Contrast - *If We Ever*
High Contrast deliberately emulates the classic sound of pitched-up vocal samples. There's even a piano in there for good measure.

AC Slater - *Jack Got Jacked (Jack Beats Remix)*
This filthy fidget house track has classic jungle breakbeats on an appropriately jackin' groove. Rave stabs and vocal sample slices harp back to a dark 1992 hardcore vibe without losing their fresh edge.

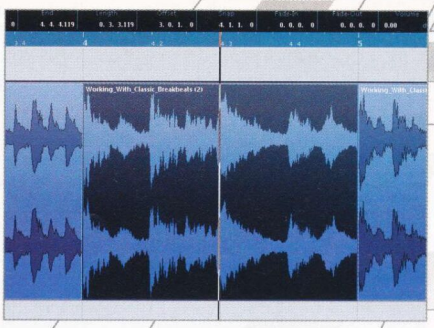
Sub Focus - *Last Jungle*
This atmospheric track uses familiar sounds, mixed to perfection, that go well beyond the scope of old-skool technology.

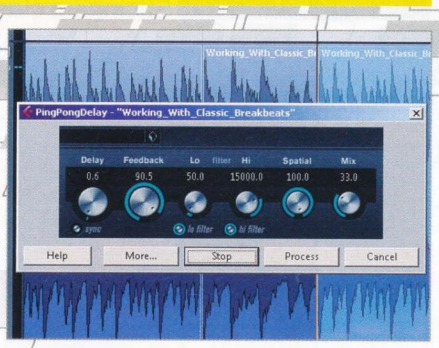
The Prodigy - *Take Me To The Hospital*
The Prodigy drifted away from hardcore from the early 90s until the release of their latest album, *Invaders Must Die*. This track represents their return to the chaotic rave sound.

SKisM - *Rave Review*
SKisM pulls out classic hardcore stabs, vocal snippets and breakbeats, then fuses them with edit-heavy dubstep - marrying the erratic energy of that early sound with the slick production for which he's known.

Rusko - *Kumon Kumon*
Quite frankly, this track sounds like an extra clean and punchy interpretation of the classic, circa 1992 hardcore sound. C'mon!

> Step by step
Futuristic edits and effects





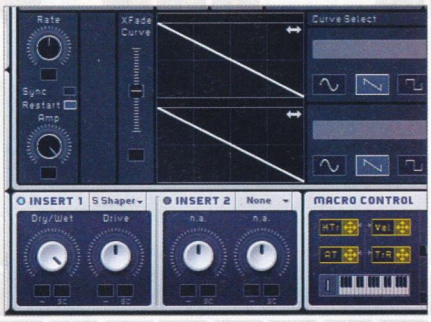
1 > Let's use the breakbeat we produced on the previous page. You can follow along using the file **Working_With_Classic_Breakbeats.wav** on the **cm** DVD. Chop the fourth bar of the breakbeat, take the first half of it and timestretch it using a modern timestretch algorithm. That will create some nice, unusual artifacts.

2 > Now chop or select the fifth bar and find a delay plug-in that will let you add a tightly timed delay with lots of feedback that isn't tempo-sync'd. This produces a high-pitched ringing sound; you may have to turn down the results to level it out with the rest of the track.

3 > For the sixth bar, we want something twisted that wouldn't have been done back in the early days. To that end, add a Comb Filter, turn on **Vowel Mode** and make the **Cutoff** step randomly (we've used the **Gargle** preset in WOW).

4 > Next up, lets try some stereo ring modulation for the seventh bar, which has a similarly quirky effect to the vowel filter we used in the previous bar. Adding a tight little filler roll on the eighth bar will wrap it up nicely.

> Step by step Making a nu-skool bass with Native Instruments Massive

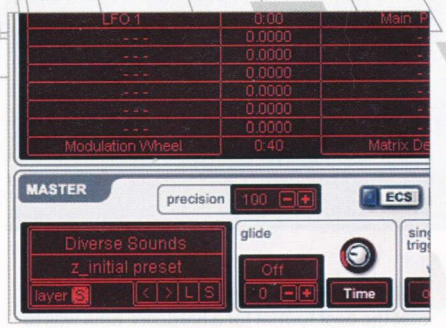


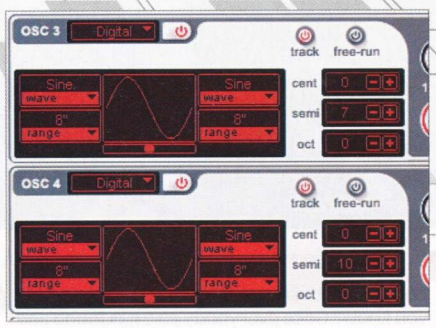
1 > Massive is considered a beast for fresh bass sounds these days. From the default state, move OSC 1's **Wt-position** all the way to the left and set its **Amp** to around about 3 o'clock. Now turn on OSC 2, pick the **M-Talk (Modern Talking)** waveform, and set its **Pitch** to **+12.00**.

2 > On the Voicing page, push **Unisono** up to **2**, hit the **On** switch in the **Pitch Cutoff** section and slide the fader to the right ever so slightly to get a bit of movement. Now turn the **Pan Position** on as well for some juicy stereo width.

3 > Drag the **5 LFO** handle to modulate OSC2's **Wt-position**, and drag it down until the green curve points to about 9 o'clock. On the LFO itself, select the sawtooth shape. To finish, activate Insert 1, using **S Shaper** (Sine Shaper) and push the **Drive** knob to about **50%**.

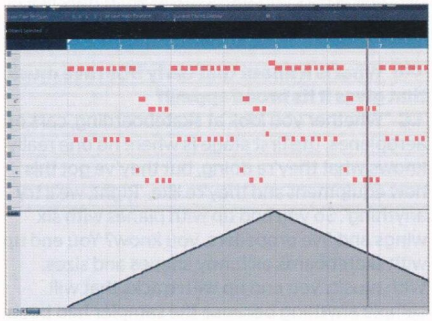
> Step by step Crafting a nu-skool stab with LinPlug Albino 3





1 > In Albino 3, browse to the **Diverse Sounds** folder and find the **z_initial** preset. Set **Precision** to **100**, activate all four oscillators and make sure they're all set to **Digital** mode. Next, hold down **Ctrl** and click the **Vol** knobs of all four oscillators to reset their levels.

2 > Pitch OSC 2 up by **3 Semi**tones, OSC 3 up **7**, and OSC 4 up by **10** to create a minor 7th chord. Set Filter 1 to **Comb**, push **Stereo** to **1.00** and knock the **Cutoff** knob all the way to the bottom, then spin the **Res** and **Track** knobs all the way to the top.



3 > Set all the oscillator waveforms to **SawSpec2**, activate **Free-run** and push all of their **Spread**s up to about **50%**. In the Mod Matrix, swap the existing Modulation Wheel destination from the default **Matrix Depth 1** to **Fil 1 Cutoff** and set the amount to about half.

4 > Now it's time to program your stab riff. Once you've done that, use the mod wheel CC to create a morphing, twisting effect. If you want to beat the old-skoolers at their game, it's a good idea to get used to using swing quantise grids.

Piano hands

Big house pianos were all the rage in the early rave days, even on some of the darker records, and they're one of the main features that distinguishes hardcore breaks and its cousin styles from other dance music genres. To get started, play a rhythm on a three- or four-note chord with the right hand, and interject each chord with a single note (or two octaves of the same note) with the left hand.

The sound is important too. Realistic or soft piano sounds are a big no-no. The affordable synths and keyboards at the time usually produced chunky, clunky timbres that were extra bright and almost percussive in nature. Korg's M1 Legacy plug-in produces a classic patch on a budget, as does Siegfried Kullmann's free SQ8L (although that's a slightly less typical, synth-piano-type patch).

In this age of virtually unlimited tracks and channels, there's no need to over-process a piano patch to get it to cut through the mix: instead, layer your piano riffs with clean synths to give them additional sheen and stereo width. Remember that you're free to produce crazy edits with piano loops, like we have with breakbeats in this guide, in order to keep the sound fresh.

DJ LUNA-C TALKS HARDCORE

In 1992, a group named Smart E's reached Number 2 in the UK charts with their tongue-in-cheek hardcore single, *Sesame's Treet*. Group member Chris Howell (aka Luna-C) decided to invest his share of the profits in building a home studio. As a result he started Kniteforce Records, which developed a cult global following via the underground rave scene. Now he runs Kniteforce Digital, hosts a popular monthly podcast and is about to release his autobiographical book, *How To Squander Your Potential: The Smart E's Story*. We caught up with the man himself to get his take on hardcore in the 21st century.

cm Some would say that recently it's become more acceptable for modern artists to reference the classic breakbeat sound. Do you agree?

LC "I think that everything has got much more chaotic in the last couple of years. It seems like all the borders between the different styles of dance music have fallen down. It used to be that if you were making DnB, you wouldn't make a house tune or a dubstep track. Everyone would be like, 'Oh, you're selling out!'. But now, it's the norm to do whatever you like – so you can reference breakbeat if you want to. It's more like the original rave scene, really, where you could just do what you wanted. No one got bothered whether it was like kick drum or breakbeat or what. I think it's fantastic!"

cm What do you think has caused this?

LC "You hone the skill of making, say, a hard house track to such a point where you end up boxed in by the restrictions that the scene has, you know? Once everybody else has found and copied that perfect format, then you're stuck and it all gets really boring. People get fed up and move to another scene. And when every scene has done that – which they have, pretty much – and once those formulas have been played to death, people get bored and start messing with it. I think that's a really good thing. I think it's the best it's been since, well, the early days, really. I think finally electronic artists have become artists and they can do what they like instead of being boxed in by one thing."

cm What is it about that early 90s rave music that gives it its broad appeal?

LC "Whether you look at skateboarding, cars or aeroplanes, the first stage is where no one really knows what they're doing, but they've got this new equipment and they're like, 'Right, we'll try anything'. So you end up with planes with six wings and five propellers, you know? You end up with skateboards all funny shapes and sizes. With music, you end up with tracks that will sample anything because the sampler had been invented. No one really had a clue what they were doing. We just had this big blast of music where everyone's doing everything, which is really exciting... but a lot of it isn't very good, and a lot of it is badly produced. The technical side is very basic, whereas the ideas side is very fluid."

cm Why do you think that era was so short?

LC "It all comes down to what I was saying before about the perfect format. Over a period of five or six years, people started to work out that the best format for a hardcore tune was to have a female vocal and a piano and a breakbeat with maybe a kick drum in it, and so the scene became a certain way, and it exploded, because everybody liked that. After that, though, it hadn't got anywhere to go – because anybody who did anything different wasn't in that scene – and it kinda faded out. And so the ravers moved to another scene – you know, hard house or drum 'n' bass. More people got involved, that exploded again, but the same thing always happens, you know? A scene only goes on for a number of years until people are bored.

"Dance music kind of goes in circles, but each time it goes from the end to the beginning again there's a whole bunch of new techniques and equipment. If DeadMau5 made a hardcore tune, it wouldn't sound like an old hardcore tune, because it can't. He's got so much more skill and there's so much more equipment."

cm What's your current studio setup like?

LC "When I moved to America I sold my old studio, but I kept a few pieces like the SH-101 and the TB-303, because I like a bit of hardware. The profit I made when transferring the money meant I could get a top-of-the-range Mac and pretty much fill it up with things like the Waves bundles, Omnisphere and other pieces of software. In the last couple of months, though, I've almost stopped using hardware altogether for the first time in my life."

www.kniteforcerevolution.com

HARDCORE BREAKS TIPS

BE ORIGINAL WITH YOUR SOUNDS

The early rave scene relied heavily on eclectic samples, but with today's music technology you're free to produce fresh sounds. Disregard dodgy old acappellas and get the microphone out instead. Do whatever you can to outshine the technology of old and you'll find that your productions will naturally sound fresh, while also recreating that rave vibe.

LISTEN TO MODERN MUSIC

Check out what your favourite artists are doing in other popular scenes and consider how you can incorporate their fresh stylistic ideas into your work. You can choose to be authentic to the sonic properties of the original music, or you can choose to be authentic to the vibe and ethos. Ironically, the latter option requires that you always push the current technology to its limits.

WHEN LESS IS MORE

Perhaps the technical limitations of trackers and early affordable MIDI systems forced the producers of the early 90s to use less tracks and keep arrangements simple, but within those constraints they found solutions that worked. That's an attitude we can learn from today. When there are fewer elements competing for space, there's less than can go wrong in the mix, and there's also plenty of room for each sound to stand tall and play its role in the track without obstruction. Simplicity can be the key – don't forget it!

Taking inspiration from the work of other artists will help to keep your tracks fresh

HAVE FUN

The secret ingredient to early rave music is a nonchalant attitude. Use your tools as if they're toys and play with them to find out what makes fun sounds. Don't worry if the resulting sounds aren't particularly melodic – it's most important that you enjoy what you're doing. If you're smiling while you put your stuff together, you significantly increase the chances of having audiences smile when they hear it.

KEEP IT DIGESTIBLE

When you take the cap off your creativity, it can be tempting to keep switching and throwing in new sounds and edits. Just do your best to keep a neutral perspective and to think about how it will all sound to a fresh pair of ears. Let your ideas breathe by establishing a concept before you mutilate it, and make sure that however far off the scale you go, each bar flows well into the next.

TIPS FROM THE PROS

BILLY DANIEL BUNTER

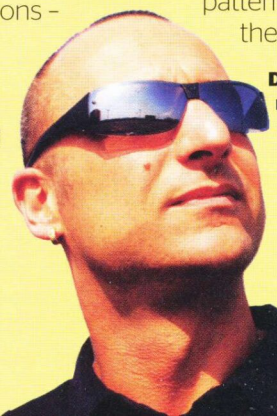
"When you set about your tracks, make sure that all your loops, percussion and sound samples are as clean and clear as possible. For me, when creating classic vibes in a modern era, I want the feeling of music from days gone by, but with crystal clear results."

SPARKY

"When making the bassline for your track, don't be afraid to experiment with splitting the sounds into different frequency ranges and effecting each range differently. For example, you could split a sound into three sections – low, mid and high – and output to three separate channels. Keeping the low dead centre and clean, crunch up the mid with some distortion and hard EQ, and get the tops really shiny. Then spread the stereo field as wide as possible, even using a sample delay to spread it *really* wide. When you're done, mix all three parts back to a single group channel, and layer it up with a big 50Hz sub. That'll give your bassline sound a very dynamic feel."

SLIPMATT

"Especially with breakbeat and breaks, be very creative with your drum loops and patterns – don't be lazy and copy the same loops across. For me, detail is the key to a timeless piece of music. Make sure every beat is absolutely bang on time to the finest detail, and then give each pattern and loop its own space in the mix for more impact."



DJ Slipmatt (left) is a world-renowned DJ and producer with a string of accolades. Billy Daniel Bunter is another rave scene veteran responsible for hits in a variety of dance genres. Together with multitalented studio engineer Sparky, they promote the rave breaks sound via the multifaceted Can You Feel It Media. Check out www.canyoufeelitmedia.com to find out more.

Hardcore breaks in the 21st century

Sparky – *Sometimes Dumb*
A great introduction to the current scene, Sparky's hectic breakbeats and gritty stabs team up with lush pads to produce a track with a DnB influence.

Mulder – *Cue Burn*
This tune uses the structure of a classic early hardcore track, but features a jacking groove on the breakbeat and a funky bass patch distinctly of *this* era.

Candy Cutz – *Insanity*
This is a soulful, unashamedly old-skool-tinged vocal track with a heavy Amen beat and an original piano riff.

Skream – *Burning Up*
Another bass-heavy, hardcore-styled track from one of the leading lights of dubstep, this one causes heated debate as to what genre umbrella it falls under.

Alien Eye – *Found A Café*
A cheeky track from a decade ago that sounds like it's from two decades ago. *Found A Café* has gone down in history and is regularly played alongside old-skool classics.

Luna-C – *Hey! Noise!*
Extremely groovy breakbeats meet a retro piano and all kinds of eccentric samples on this offering from the exceptional *Wonko The Sane* EP.

Tango & Ratty – *Is It Live*
Legends Tango & Ratty return with their own brand of j-tek, which is somehow both dark and rushy. **cm**